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EMO

NATIONAL DIGEST

Federal EMO Information Plan

The Emergency Broadcasting Plan

Civil Defence in Ireland

Target Area Headquarters

The Marshallese Incident

Federal Training Programme

EMERGENCY MEASURES ORGANIZATION

THE EMO NATIONAL DIGEST

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The EMO NATIONAL DIGEST is published bi-monthly to provide current information on a broad range of subjects dealing with civil emergency planning. The magazine is published in English and French and may be obtained by writing to the Emergency Measures Organization, Privy Council Office, East Block, Ottawa.

In addition to publishing articles which reflect Canadian Government policy the Digest may also publish articles by private individuals on subjects of current interest to the emergency measures programme. The views of these contributors are not necessarily subscribed to by the Federal Government.

Director: R. B. CURRY. *Editor:* A. B. STIRLING.

ROGER DUHAMEL, F.R.S.C.
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OTTAWA, 1962

PROTECTION FACTOR OF 100 FOR FALLOUT SHELTERS

Many persons have asked why a minimum protection factor of 100 is recommended for fallout shelters.

Acute radiation sickness can be practically eliminated if the radiation dose from fallout is not higher than 25 radiation units over a 48-hour period.

Unprotected persons in a seriously affected area following an attack could receive about 2,500 radiation units from fallout.

To reduce such a dose to 25 units, a person would need a shelter with a protection factor of 100. That is to say for every 100 units striking the outside of the shelter, only one unit would pass through the structure and reach the occupants. Out of the total 2,500 units to which a person in the open would be exposed, only 25 units would penetrate to the people occupying a fallout shelter with a protection factor of 100.

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FEDERAL EMO INFORMATION PLAN 1962-63

The following article was prepared for the DIGEST *by Lt.-Col. J. D. Donoghue, Federal EMO Public Information Officer. Prior to his secondment to EMO Lt-Col. Donoghue served as Deputy Director of Public Relations, Army Headquarters, Ottawa.*

THIS PLAN is subject to the granting of parliamentary approval for EMO estimates 1962-63. It will be completed in the fiscal year 1962-63 and covers the activities of EMO only. Other federal departments will be developing their own plans.

The plan is a guide for provinces and municipalities in preparing their information programme.

It is expected that a consolidated information plan for all Departments having major emergency measures responsibilities will be published in the future. This will be developed from draft information plans provided by the departments to EMO annually.

The first information plan was issued in February, 1961. Since that time extensive co-operation has been given to EMO by the press, radio and television. Within the past 12 months the Prime Minister has spoken to the Nation about Emergency Measures three times on national radio networks and once on national television. In addition, members of EMO have participated in ten network television programmes, including a series of three presentations on the CBC French Language Network.

In addition to the Prime Minister's address and the Exercises, three national network radio broadcasts were produced.

Newspaper columnists, editorial writers and news editors have devoted increasing space to the subject of emergency measures and both Exercise TOCSIN 1961 and TOCSIN B 1961 were given substantial coverage by the press. This coverage also included information on the activities of the provinces and municipalities.

Most Canadian periodicals also have published feature articles on emergency measures subjects.

Attention of the news media to emergency measures subjects showed a marked increase between February and June, 1961. In August increased international tension focused even greater attention on emergency measures and resulted in an overwhelming demand from the public for information. To date more than 10 million pieces of literature have been distributed to the public through the provinces.

The plan whereby emergency measures information will be made available to the public during the fiscal year 1962-63 is outlined below.

General Outline

The public will continue to be provided with facts and details on:

(a) The Threat—or the reason emergency measures are necessary. The reasoning is:
  (1) Past and current world events indicate that a war is a possibility though it may not be probable;
  (2) A war today probably would involve nuclear weapons;
  (3) Therefore action must be taken now to reduce losses in a nuclear war.

(b) Effects of Nuclear Weapons—An individual's protection plan must be based on an understanding of the effects of nuclear weapons. This knowledge will help each individual plan effectively.

(c) Government Plans—Information on this subject answers the question: "What is government doing about it?" Subject to security and recommendations being considered for development of policy, all details of government emergency measures will be made available to the public. It is in this field that those responsible for writing an information plan should ask themselves the question: "What does the public need to know about our planning in order to co-ordinate personal plans with emergency measures?" The answer provides the information that is vital to the public. A study of the available means to distribute information plus (a) (b) and (c) above, provide the framework for an information plan. Information also should be provided on specific accomplishments; e.g., the numbers of municipalities organized to receive evacuees; completion of building surveys; numbers trained in various courses.

(d) Responsibilities of Individuals—Information on this subject answers the question: "What do I do about it?" One means of supplying the answer is by distributing the pamphlet *11 Steps to Survival.*

Information on these four subjects is essential for public understanding of emergency measures. The paragraphs that follow describe how the information will be provided.

Publications

Reprints—EMO will provide reprints of the following publications in the fiscal year 1962-63:

(a) YOUR BASEMENT FALLOUT SHELTER—*Blueprint for Survival No. 1*—prepared by EMO describes the why, where, when and how of the basement fallout shelter.

(b) 11 STEPS TO SURVIVAL—*Blueprint for Survival No. 4*—prepared by EMO describes the steps an individual can take to increase chances of survival.

(c) SURVIVAL IN NUCLEAR WAR—prepared by EMO is an accordion fold leaflet summarizing the highlights of *11 Steps to Survival*. It is useful for fairs, exhibitions, offices, plants and post offices.

(d) WALLET CARD—prepared by EMO describes steps to be taken in an emergency and explains the meaning of the federal warning signals. Suitable for carrying in the wallet. Useful as a handout.

(e) WALL CARD—prepared by EMO describes the steps to be taken in an emergency and explains the meaning of the federal warning signals. Suitable for placing on a wall as a ready reference.

(f) SURVIVAL IN LIKELY TARGET AREAS—*Blueprint for Survival No. 5*—prepared by EMO is designed to assist those Canadians who live in major cities which might be target areas in a nuclear war. It examines the advantages and disadvantages of evacuation and shelter.

(g) SIMPLER SHELTERS—prepared by EMO is a leaflet containing five less complex designs which nevertheless provide protection, but at a sacrifice in comfort and storage capacity.

(h) BLAST SHELTERS—*Blueprint for Survival No. 6*—prepared by EMO describes the above and below ground 10 p.s.i. and 30 p.s.i. blast shelters. It lists the designs and specifications available which the reader orders separately. These are NOT "do-it-yourself" projects. Expected date of release is July 31, 1962.

Other Departments' Publications

(a) BASEMENT FALLOUT SHELTER—*Blueprint for Survival No. 2*—prepared by Central Mortgage and Housing Corporation describes incorporating a shelter when building a new home.

(b) FALLOUT ON THE FARM—*Blueprint for Survival No. 3*—prepared by the Department of Agriculture describes precautions for rural residents, their livestock and food.

(c) WELFARE TIPS FOR SURVIVAL—Prepared by the Department of National Health and Welfare contains personal survival information relating to the five Emergency Welfare Services.

(d) YOUR EMERGENCY PACK—prepared by the Department of National Health and Welfare has been reprinted with a revised format and cover. Reprints will be produced for fiscal year 1962-63.

All the publications, except BLAST SHELTERS, may be obtained by writing to:

EMO
POST OFFICE BOX 10,000
in your provincial capital city.

Posters

EMO will provide display posters for use at fairs and exhibitions to advertise available publications. Space will be provided for inserting local details.

Shelter Models

Scale model shelters of the designs published in the leaflet *Simpler Shelters* will be provided. Models of basement fallout shelters have been delivered to all provinces.

Television and Radio

EMO will continue to maintain a close liaison with radio and television and will inform Regions when programmes on emergency measures subjects are to be presented on networks. Regional Directors have been requested to inform EMO of regional programmes.

TV film clips and radio spot announcements were produced and distributed to all stations and the provincial authorities have been informed. It is recommended that local EMO/CD authorities provide stations with local details for inclusion in the film clip or radio announcement.

Films

A one-half hour film on the subject of *National Survival* now is being produced by the National Film Board for EMO. But this will not be available until late Fall or early in the Winter. It will cover the broad aspects of national survival. A second film on the subject of Family Survival Plans will be started in the near future.

EMO National Digest

The first issue of the *EMO NATIONAL DIGEST* was produced in February, 1961. The aim of the *EMO National Digest* is to provide persons and organizations voluntarily engaged, employed or interested in emergency measures-civil defence duties with brief, informative articles on plans and preparations related to the survival of Canadians and the continuity of government at all levels in the event of a nuclear war. It is published bi-monthly in English and French.

Five provinces publish similar digests. These are provincial in character. The *EMO National Digest* is

(concluded on page 16)

THE EMERGENCY BROADCASTING PLAN

The following article was prepared for the Digest by F. P. Johnson, Director of Special Projects, Canadian Broadcasting Corporation.

MOST PEOPLE, when they hear that there's been a serious accident or disaster, listen to their local radio station for a news report. Broadcasting over the years has built up a reputation of being "Johnny-on-the-spot" when it comes to keeping the public informed of such events. When it's a disaster such as the Winnipeg flood or the Springhill mine explosion, broadcasting stations and networks provide means for keeping the public informed and for the issuing of instructions and advice.

It's logical, then, that in survival planning for a nuclear war, the authorities responsible for such planning should consider use of broadcasting facilities to warn and instruct the public, and that is precisely what has been done. In fact, the sounding of the Alert Warning on sirens means that the Government expects an imminent attack on the North American continent and that the public should listen to the radio for instructions.

In wartime, all national telecommunication systems, including radio and television broadcasting, will be controlled and administered by the Emergency National Telecommunication Organization (ENTO), a body responsible to the Minister of Transport. Under the authority of ENTO, the CBC has been delegated the responsibility for developing, organizing and operating an Emergency Broadcasting Plan.

If the North American continent should ever be subject to a nuclear attack, it is imperative that the public be warned as quickly as possible. Broadcasting facilities, operating in conjunction with the Army's National Survival Attack Warning System, are an obvious medium for this purpose. CBC and privately-owned "standard band" radio stations combined reach about 98% of the population of Canada, and TV is not far behind. There are, however, certain prerequisites in using broadcasting facilities in order that government at various levels may warn, instruct and advise the public.

First—it is imperative that only official announcements—warning and instructing the public—be broadcast.

Second—it is essential that such official warning announcements and instructions be broadcast as quickly as possible after the Army has sounded the National Alert.

Third—it must be possible to keep some, if not all, broadcasting stations in operation during the attack and post-attack phases, even though Hydro power has been disrupted and fallout radiation intensities have reached a dangerous level.

Let us now examine the prerequisites and the associated problems: *The first*—only official announcements are to be broadcast. We are all too familiar with "flash" news reports that we've heard or read which, later on when more factual information became available, have been shown to be quite erroneous. We can't afford such a risk during the pre-attack and attack phases of a nuclear war. In order that all stations broadcast only official announcements, they must either be instructed individually as to what to broadcast or simultaneously be fed official announcements originating from a Central Federal or Provincial Control Studio. Feeding all stations simultaneously obviously provides the desired coordination and control, but it requires an organization which would be in a position to co-ordinate the technical facilities and assume the responsibility of originating the official announcements.

Of the approximately 236 CBC and privately-owned "standard band" radio stations, 111 are connected daily to one of the three CBC radio networks while such networks are in operation. In addition, there are approximately 90 low power radio transmitters permanently connected to one of the CBC radio networks which, in many cases, provide smaller communities with the only radio service available. Such stations combined reach about 97% of the population of Canada. The nucleus of an emergency radio broadcasting network then exists for the hours that such networks are in operation. Normally, this is about 16 hours per day local time but, because of the time differences in Canada, the period during which radio networks are in operation in all provinces simultaneously is somewhat less than this.

To establish a 24-hour state-of-readiness, network services must be in operation at all times and stations not presently connected to one of the networks must be provided with such a connection in order that they may be fed the official announcements from the Emergency Broadcasting Network.

The *second* requirement is that these official warning announcements and initial instructions be broadcast as quickly as possible after the Army has sounded the National Alert Warning. Normally, orders to the companies providing the radio network services for all of Canada, to meet daily national and regional programme requirements, are centralized through Traffic Offices in Toronto. It is completely impractical to consider ordering up the Emergency Broadcasting Network using the same procedure. To arrange networks in the configuration required for emergency broadcasting, decentralized ordering under emergency conditions is required.

So much for the Emergency Broadcasting Network —the facilities existing, and the additional facilities required to meet emergency broadcasting requirements.

Action by the Corporation to implement the Emergency Broadcasting Network is predicated on the Army having been authorized to sound the National Alert. Between the Federal Warning Centre and the CBC's Ottawa Radio Studios there exist full communication facilities. Also, between Provincial Warning Centres and the nearest CBC studio, similar facilities are provided. By means of these facilities the Army's Federal Warning Centre can immediately let the CBC know at the Central Federal Control Studio and through Provincial Warning Centres at Provincial Control Studios that they have been authorized to and are sounding the National Alert. On receipt of such information, the CBC can then implement pre-arranged procedures and order up the Emergency Broadcasting Networks, pre-empting all previously arranged network schedules and programmes. Within five minutes or less under this Plan, the Federal Control Studio will be connected to all Provincial Control Studios and all broadcasting stations in each province connected in such a way that they will receive a feed from their Provincial Control Studio. Operating personnel of individual radio, TV and FM stations will be alerted by an alarm device connected across the network termination that the Emergency Broadcasting Network has been set up and is ready to feed official announcements to be broadcast over all stations in operation at the time. All broadcasting stations in Canada have been instructed by the Department of Transport that under such conditions they are to discontinue normal broadcasting and to re-broadcast only what is being fed to them by means of the Emergency Broadcasting Network.

Thus, within a matter of minutes of the sounding of the National Alert by the Army every broadcasting station in Canada will be connected to the Emergency Broadcasting Network and, if in operation, will be broadcasting the Army's Alert Warning Message and other official survival announcements.

All of the foregoing presupposes that initial broadcasting of the Alert Warning and subsequent survival announcements will be done from peace-time studios, many of which are located in the center of possible targets. It is true that initial broadcasts may emanate from such studios, but the Emergency Broadcasting Plan will also provide emergency studios well removed from such targets which, when manned by broadcasting personnel, will take over the responsibilities of originating the announcements of warning, instructions and advice.

Earlier, it was stated that the third problem to be resolved is to make sure that some, if not all, radio stations remain in operation during the attack and post-attack phases, even though Hydro electric power fails and fallout radiation intensities reach a dangerous level. This means that certain stations will have to be earmarked as "key stations" and equipped with emergency power plants and a protected area from which operating personnel may continue to operate the station safely during periods of heavy fallout intensities. Such stations, if not normally in operation on a 24-hour basis, will be staffed outside of normal operating hours and be ready to go on the air, should an emergency arise, within a matter of seconds.

To recapitulate the features of the Emergency Broadcasting Plan:

1. **All radio and television broadcasting stations in Canada, with the exception of some northern stations, will have 24 hour per day connection to the Emergency Radio Network.**
2. **At Ottawa and in each province, a radio studio which has direct communication facilities with the federal and provincial warning centres will be staffed 24 hours per day.**
3. **Existing CBC radio networks will operate 24 hours per day.**
4. **Emergency orders will permit the setting up of the Emergency Broadcasting Network in a matter of minutes.**
5. **All primary target areas will receive official warning and instructions by radio over local stations, many of which normally remain on the air 24 hours per day, or over radio stations which are maintained in a state-of-readiness to go on the air in a matter of seconds.**
6. **Radio transmitters which are considered "Key Stations" will be provided with emergency standby power facilities and modified to protect operating personnel during periods of high intensity fallout radiation.**
7. **Emergency broadcasting studios will be established.**

* * *

CIVIL DEFENCE IN IRELAND

The following article first appeared in The Association of Civil Defence Officer's Journal. *The author, J. G. Buckmaster, is the Deputy Director of Civil Defence, Department of Defence, Eire.*

Statutory Basis

THE STATUTORY BASIS for civil defence is the Air Raid Precautions Acts 1939 to 1946. The principal Act of 1939 was passed immediately before the outbreak of war and the following general provisions indicate the nature of the A.R.P. Organization which existed during 1939-45:

(a) The local authorities have responsibility for formulating schemes or plans for a civil defence organization within their functional areas in accordance with Regulations made by *the Minister for Defence* under these Acts.

(b) Financial assistance by way of grant to local authorities on approved expenditure.

(c) Powers for the provision of public shelters by local authorities.

(d) Powers and duties of essential undertakers who may be required by the Minister for Defence to prepare and submit civil defence schemes in respect of their undertakings in accordance, in particular, with the matters which may be prescribed by regulations made by the Minister for Defence under the Acts.

(e) The Minister for Defence may provide such services, train such persons and acquire such civil defence equipment as he considers necessary. The Minister may also lend, supply free of charge, or sell such equipment.

As in most countries the A.R.P. Organization was "stood down" in 1945 and no arrangements were made to maintain even a skeleton organization thereafter. When at the end of 1950 the Korean War brought about a serious deterioration in the international situation the need for a civil defence organization became manifest and a reorganized C.D. branch was set up in the Department of Defence to organise civil defence throughout the State. The following paragraphs indicate in broad outline the general organization of civil defence in Ireland as it now exists:

General Administration

As the Minister for Defence is the Minister of State primarily responsible for Civil Defence, the Department of Defence, in which there is a special Civil Defence Branch, is responsible for the overall direction and control of the Civil Defence Organization.

This Department initiates plans, secures technical information, settles the basis of the financial arrangements arising between the state and the local authority schemes. Recently the rate of grant payable to local authorities has been increased from 60% to 70%.

In particular, the Department of Defence carries out the following functions in relation to planning:

(a) Prepares the general Civil Defence control plan. At present the County Control plans (details of which are listed beneath under "Local Organization") are being considered by the local authorities.

(b) Provides technical advice on all aspects of Civil Defence to local authorities in connection with the local organization and training of Civil Defence volunteers.

(c) Co-ordinates the Civil Defence plans of other Departments of State as indicated in the paragraph below entitled FUNCTIONS OF OTHER GOVERNMENT DEPARTMENTS.

(d) Maintains liaison with the military branch developing the warning and monitoring of radioactivity and provides training directives.

(e) Planning Staff.

A planning staff which includes senior administrative officers, the senior Civil Defence technical officers and a senior army officer assigned for full-time duty with Civil Defence considers all major planning and policy proposals put up by the various sections of the Branch and makes recommendations there on.

Civil Defence School

This School, which is administered by the Department of Defence was established in 1951 and is situated in the environs of Dublin. Some 500 Civil Defence instructors (including military instructors) have qualified at this school (short courses for water engineers, agricultural advisers, medical officers of health have also been held at the school).

The full cost of running the School is met by the State. It is *not* residential.

Local Organization

The following is the authority structure for the purpose of the Air Raid Precautions Acts.

There are four county boroughs (i.e. cities) and twenty-seven counties in the State. Each such County Borough or County has a City or County Council respectively, and a Chief Executive Officer, viz.—the City Manager in the former and the County Manager in the latter—and also a Civil Defence Officer.

The Civil Defence organizational structure is as follows:

County Control

This will be located in the same town as the local authority headquarters. Each County is divided into arbitrary sub-divisions called sub-counties which will have their own headquarters. The sub-counties are in turn sub-divided into districts which coincide with the Dispensary District. The Dispensary Districts are again sub-divided into Warden Post Areas which correspond with electoral divisions and a final sub-division to Patrol Post which corresponds with townlands. These sub-divisions are based on the nature of the country which is mainly agricultural and rural. Special control plans are being devised for the County Boroughs which overlap part of the county areas. The above is summarised as follows:

Co. Control—Co. Town
Sub-County Control—Sub-County Area
District Warden Post—Dispensary Districts
Warden Post—Electoral Divisions
Patrol Post—Townlands

The following is the staffing arrangements at County Control:

Controller—Co. Manager
Deputy Controller—Co. Secretary
Co. Executive and
Operations Officer—Civil Defence Officer

Heads of Sections

Warden
Rescue
Auxiliary Fire Service
Casualty and ambulance
Welfare
Headquarters

All these (except possibly the Chief Warden) are local authority officers who will have a general responsibility for the development of the organization. In practice most of the organizing work in peacetime will be the responsibility of the Civil Defence Officer under the general direction of the Regional Civil Defence Officer.

Scientific Intelligence teams are now being organized in each County consisting of 1 Senior Scientific Intelligence Officer and 2 S.I.O.'s.

Regional Organization

For the purpose of overall Civil Defence control it has been found necessary to establish a superstructure linking local control with the central government. To achieve this the country has been divided into eight regions: each region includes 3 to 5 counties. The military Command areas (of which there are 3 in the State) have been revised so as to ensure that combination of Civil Defence regions will fit in with command boundaries. Eight Army officers of senior rank have been appointed as Regional Civil Defence Officers. Each Regional Civil Defence Officer is responsible for the working out of the regional control system, the establishment of mutual support arrangements between the counties within his region, and the co-ordination of the organisation and recruiting of Civil Defence in his region. In addition, Regional Civil Defence Officers will play their part in assisting the County Managers and County Civil Defence officers in their work of building up the local authority Civil Defence organisation.

Recruiting and Training

Five hundred and thirty-seven instructors have trained for local authorities. Since recruiting started in 1957 about 6,500 volunteers (men and women) have joined Civil Defence. Training covers the following services: Warden, Rescue, Welfare, Casualty and Fire-fighting. The aim is to secure, as far as possible, a warden in each patrol post area in each county, and as many groups of each of the other services as can be secured in towns and villages. The main consideration at present is the securing of key personnel for each service which would facilitate rapid expansion.

Uniforms and Protective Clothing

Uniforms and protective clothing are supplied for wear by the volunteers. The uniforms are purchased by the local authorities from the State (but at present 70% of the cost is refunded). They are issued free to the volunteers. The protective clothing is issued without charge to the local authorities for the use of the volunteers.

Equipment

Civil Defence training equipment to a value of £400,000 will have been provided free by the State for use of local authorities by the end of March, 1962.

It includes rescue vehicles specially fitted with equipment to facilitate rescue operations, ambulances, a mobile feeding unit, radiac survey meters and dosimeters, rescue equipment in manpacks: welfare units (mainly emergency feeding equipment): first-aid training units. Ten large fire engines are being purchased this year for the Auxiliary Fire Service.

The Department of Defence has had erected throughout the State a number of rescue training ranges for the use of, but at no cost to, the local authorities.

Army Co-operation

The Army has had a number of officers and N.C.O.'s trained at the Civil Defence School to enable it to give general instruction on Civil Defence techniques to military personnel. Subject to military requirements the Army will give assistance to the Civil Defence organisation.

Garda Siochana (Police)

The Garda Siochana (Police Force) commenced initial Civil Defence training in 1961. A series of such courses for police officers was conducted and the instructors at the Police Training Depot have qualified (by courses at the Civil Defence School) as Civil Defence instructors. It is the intention that the initial training of police recruits in future will include a period of Civil Defence basic training.

Industrial Civil Defence

Plans for Industrial Civil Defence are at present being formulated by the C. D. Branch, Department of Defence.

Functions of other Government Departments

Subject to the overall direction and control of the Minister for Defence, the main responsibilities of other Government Departments in relation to Civil Defence are as follows:

Department of Agriculture—all matters relating to the effects of nuclear warfare on agriculture generally, e.g. effects of radioactive 'fall-out' on crops, on livestock, etc. A number of agricultural instructors have been given instruction concerning measures to mitigate the effect of 'fall-out' on farms.

Department of Local Government—fire-fighting problems including the organisation of an auxiliary fire-fighting service; problems relating to water supplies and sewage created by development of nuclear weapons. The Department conducting investigations in regard to the effect of 'fall-out' on water and sewerage systems.

Department of Health—organization of hospital and medical services to deal with casualty problems. The Department has a Working Party examining this problem.

Department of Justice—police problems, such as prevention of public panic and control of public if panic should develop. A police group is associated with the Working Party on evacuation.

Department of Transport and Power—meteorological information for prediction of areas of 'fall-out', etc.

The Observer Corps

The task of setting up the Observer Corps commenced in 1961 and will probably take two or three years to complete. This Corps has the primary missions of making 'fall-out' predictions and issuing warning in the event of nuclear war. To fulfil these missions it will collect and process nuclear burst and 'fall-out' information on a nation-wide basis. It will be an organization of volunteers with personnel recruited locally for service in their own areas, but it will form part of the army reserve and be subject to military discipline. It will have other functions of military significance including coast-watching and aircraft tracking. The Corps will be organized, trained and commanded by a Regular Army Staff.

The general pattern of the organization will be on the lines of the Royal Observer Corps in Great Britain.

* * *

In the April 1962 issue of the *Digest,* an article describing Emergency Welfare Mobile Teams was credited to the Emergency Health Services Division. The article was, in fact, prepared for the *Digest* by the Emergency *Welfare* Division, Department of Health and Welfare.

THE ORGANIZATION AND ROLE OF THE TARGET AREA HEADQUARTERS

The following article first appeared in the Army Journal. *The author, Lt.-Col. B. W. Lee CD, is a graduate of the Canadian Army Staff College and formerly served with the Directorate of Survival Operations and Plans.*

In June 1959, by virtue of the passing of the Civil Defence Order, the Canadian Army became responsible for the rescue of persons trapped or injured by nuclear attack on this country. This was a new task for the Army and few members had any previous experience. A new directorate, the Directorate of Survival Operations and Plans, was formed and given the task of studying the problem and producing a basic plan.

As a result of the studies conducted by DSO&P certain facts became apparent and certain assumptions were made. It seemed likely that an all out nuclear attack on Canada would affect at least sixteen of our large populated centers and that large numbers of people would be killed, injured and trapped. The immediate results of such an attack could only be suffering and chaos on a scale almost beyond imagination. It was obvious to all that the Canadian Army did not have anything near the resources required to cope with such an attack. Even if the Army swung into action, with the assistance of its own reserves, immediately an attack was delivered it would be unlikely to accomplish more than twenty percent of the rescue task. Further, under its present organization, the Army could not expect to assume control of the situation or bring forces to bear for some hours after an attack. This presented a further problem for it appeared that trapped persons could not survive under average weather conditions for much more than forty-eight hours. Under severe weather conditions the time available for rescue could be considerably less.

The problems of the rescue task resolved themselves into two basic tasks of organization. First, the Army must establish some sort of control over the damaged area as soon as possible after an attack. Second, the maximum rescue forces must be brought to bear as soon as it is safe to enter. In some cases it will be safe to enter parts of the area of damage one hour after an attack.

The plan made by Army Headquarters for rescue in a damaged area envisages each target as a separate military action, controlled by its own headquarters, and having its own forces under command. Since no satisfactory headquarters existed it was necessary to create new ones. These are called Target Area Headquarters (TAHQs) and are small units of the Regular Army. One has been established in the vicinity of each of the sixteen Canadian cities which have been designated as possible target areas. The present interim locations are as follows:

St. John's—Holyrood
Halifax—Windsor
Saint John—Camp Gagetown
Quebec—Camp Valcartier
Montreal—St. Jerome
Ottawa—Almonte
Toronto—Newmarket
Hamilton—Hagersville
Niagara Falls—Welland
London—Centralia
Windsor—Chatham
Winnipeg—Portage la Prairie
Calgary—Olds
Edmonton—Wetaskiwin
Vancouver—Chilliwack
Victoria—Duncan

It was evident that if TAHQs were to control re-entry operations after a nuclear attack they must, themselves survive the attack. Accordingly, arrangements were made to locate the TAHQs close enough to the target city to control the operation yet far enough away to escape damage by fire and blast. Also the question of fallout was considered and most units were located in the upwind direction. The ideal locations were found to be between twenty-five and fifty miles from the center of the target cities. Since it was important to establish these units without further delay there was no time to build suitable accommodation. Interim sites were chosen which met the requirements as closely as possible and possessed suitable accommodation.

The size of the TAHQ varies slightly according to the size of the target city and consequently the potential size of the rescue task. For the sake of convenience the target cities were divided into three groups as follows:

Population 750,000 or over—Type A
Population 250,000 to 750,000—Type B
Population under 250,000—Type C

Three sizes of headquarters were authorized, designated as Types A, B and C and allotted to targets of appropriate size. The establishments vary in strength from fifteen to twenty officers and men. In the event of war this will be increased considerably by the addition of officers and men from both the Regular Army and the Militia.

These headquarters have now been charged with the responsibility of planning the operation to re-enter the target cities after a nuclear attack. The aim of this operation is to save lives by rescuing the trapped and providing first aid to the injured. In the event of an attack it is the task of the TAHQ to command and control the actual operation.

To carry out its function the headquarters must have the cooperation of governments at both the provincial and municipal level. Each municipality should have a plan to protect its citizens which should be coordinated with the Army's plan for rescue. A general knowledge of each other's plan is not sufficient; co-ordination must be reached in all fields and in all details. Some of these fields are discussed in the following paragraphs.

The police forces of provinces and municipalities must have a plan to control movement during a pre-attack evacuation. This evacuation may be planned or it may be spontaneous if sufficient warning time is received. At the same time the TAHQ must plan for traffic control during re-entry. These two plans may well overlap if the city is attacked while evacuation is in progress. In any event it is likely that both plans will require the use of the same resources. It is essential that mutual assistance and co-operation be arranged if this is to be achieved. It is necessary for a senior civil police officer to be appointed in each target area to act as adviser and liaison officer between the civil and military police forces.

The Army's re-entry forces do not contain any firefighting units, so reliance must be placed on municipal resources. Before these forces can be used for re-entry operations, plans must be made to designate areas of operation for all resources available. These plans must include the number of fire companies, their locations, assembly points, routes, and tasks. Without the co-operation and assistance of municipal governments this would not be possible. Under these circumstances one senior fire chief must be appointed and he must have the power of decision involving all the fire forces of all the municipalities likely to be under attack or involved in re-entry.

If adequate co-ordination is to be achieved the location of civil government headquarters in relation to TAHQ should be considered. Close liaison in the planning stage demands that municipal emergency headquarters be located close to TAHQ. Since regions are now divided into zones for emergency control purposes, it follows that some zones may have one or more target areas within their boundaries. These zones will have to supply the bulk of the manpower and resources for the re-entry operations. Joint planning is vital here and it would be helped if the zone headquarters were adjacent to, or at least in the same town as, the TAHQ.

Once the TAHQ was located and had established liaison with civil governments, it was able to begin making an interim plan for the re-entry operation. The first step was to assess the task, the second to organize a system of control for the area, and the third to organize the forces available so that they might achieve maximum effectiveness in rescue and first aid. A fourth step, which was somewhat of a by-product at this stage, was to decide what additional units were needed and where they should be located to bring the strength of the re-entry force to a level adequate for its task.

Control is being achieved by dividing targets into sectors. The divisions made are based on the availability of routes for the re-entry forces, geographical barriers to movement, and the prevailing wind patterns which affect fallout. Each of these sectors must have a headquarters to control re-entry operations within its boundaries. Sites are being selected for these headquarters and communications established with TAHQ. The sites must not be affected by the attack if at all possible and therefore should not be closer than twenty miles from the center of the target area. Sector headquarters will not be manned in peace. Instead, they will be manned by nearby Regular or Militia staffs whenever a warning is received and during exercises and rehearsals.

During the very early stages of the operation, control of movement on roads will be most important. If complete chaos and disruption of movement is to be avoided some means of controlling traffic must be in action as soon as people start to move after an attack. This is being accomplished by establishing traffic posts at all obvious points of traffic conflict on every road leading into a target area. Traffic control teams are being organized to man these posts. The teams will be made up of local people living or working in the area of the traffic post who can be enlisted into the Militia. Traffic posts will be manned by the teams as soon as

(concluded on page 16)

THE MARSHALLESE INCIDENT

The following report was presented by Dr. Victor Bond, Director of the Division of Microbiology, Medical Research Centre, Brookhaven, U.S. National Laboratory, to a Congressional Special Sub-committee on Radiation in June 1959. The report points up the dangers of beta radiation. Before the incident there had been a tendency to ignore beta radiation from fallout.

EDITOR'S NOTE: "The Marshallese Incident" occurred in March 1954 following the detonation of a high yield nuclear device during U.S. weapon testing on Bikini Atoll. The wind shifted unexpectedly leading to fallout in significant amounts being deposited on the atolls of Rongelap, Rongerik and Uterik. At Rongelap and Alinginae atolls, 82 persons were exposed; at Rongerik, 28 American servicemen were exposed; and at Uterik Atoll, a total of 157 Marshallese were exposed.

WITH RESPECT to the Marshallese, the affected areas are termed "beta lesions" since a very large percentage of the dose received by the skin surface resulted from beta radiation. These individuals were showered with radioactive fallout following the detonation in March 1954 of a high yield thermonuclear device during weapons testing at the Pacific proving grounds. The 64 Marshallese individuals on Rongelap at the time, 105 nautical miles from the detonation, received the largest exposure and I shall confine my remarks to this group. The fallout was visible on Rongelap, described as snowlike, and began falling approximately 5 hours after the detonation. The material was deposited on the ground and on the thatched roof houses, as well as on the clothes, hair, and skin of the people. The individuals remained on the island for approximately two days, at which time they were transferred to the U.S. Naval Station at Kwajalein for medical observation.

No dosimeters were present on the island, and the doses of gamma radiation received were estimated from average readings of survey instruments held 3 feet above the ground, of the order of a week following the detonation. From these readings it was estimated that the Rongalapese received approximately 175 r. of penetrating gamma radiation dose measured essentially free in air. In addition to gamma exposure these individuals received large doses of beta radiation in areas of the body in which the fallout material was adherent to the skin. It is not possible to calculate with any reasonable degree of accuracy the dose to the skin from beta radiation. Estimates involving the known minimal dose of radiation to cause hair loss or epilation indicate that the surface of the skin probably received of the order of 5,000 or more rads.

With regard to symptomatology, with the exception of nausea in some two-thirds of the individuals during the first two days, and vomiting and diarrhea in a smaller percentage, no symptoms developed that could be ascribed to penetrating gamma radiations. However, the penetrating radiation did result in marked peripheral blood count changes. No deaths occurred as the result of irradiation and all signs and symptoms except the initial gastrointestinal symptoms referred to were related to beta lesions of the skin.

Within the first 2 days of exposure a number experienced transitory itching and burning of the skin, and some complained of lacrymation. No further signs or symptoms referable to the skin were noted until about 2 weeks after exposure, when skin lesions and epilation, or loss of hair, was noted. Approximately 90 percent of the individuals showed some damage of this nature to the skin, and a smaller number showed spotty epilation. The skin lesions first appeared as small, raised pigmented areas which later coalesced to form more extensive lesions. Most of the lesions were superficial and exhibited dry desquamation or loss of skin surface much like a fairly severe sunburn. Essentially all lesions were located in skin areas not covered by clothing, and they were most prevalent in the folded areas of skin where perspiration would tend to collect. Even thin clothing apparently served to prevent visible damage. The superficial lesions required no therapy beyond bland, soothing preparations, and apparently complete healing occurred within a few weeks. Some of the lesions were deeper, however, and showed wet desquamation or loss of skin. Such lesions became infected, and required treatment with antibiotics. The

affected areas, with the exception of one, also healed in a matter of weeks, with some residual scarring, atrophy and depigmentation. On followup examinations in the 5 years since the accident, none of the lesions has shown a tendency to break down, nor has premalignant or malignant change occurred.

In the course of initial observation it was not necessary to hospitalize any of the patients. Some itching, but no pain, was associated with the superficial lesions; however by no standard could these people be considered incapacitated. Mild pain was associated with the deeper lesions and some difficulty with walking resulted with the deeper lesions located on the feet. Here also, however, it would have been difficult to classify these individuals as incapacitated. If necessary, they could have performed essentially any task associated with daily living and survival.

Application of the Marshallese Results to Fallout Situations in General

So much for the Marshallese accident indicating that extensive beta skin lesions can occur in the face of sublethal gamma exposure; now let us consider to what degree the Marshallese incident may be considered typical of what might occur in case of widespread fallout in populated areas of the United States from deliberate attack, or from accidental nuclear weapon detonation. And I wish now to make it perfectly clear that I speak of a disaster situation, not routine peacetime operations and certainly not the long-range fallout that has resulted in essentially worldwide, very low-level contamination. There are several factors that would make one consider the Marshallese incident the worst that could reasonably pertain with respect to the hazard of beta radiation relative to that of gamma radiation (of course, populations might be exposed to considerably larger doses of both beta and gamma radiation than were the Marshallese). The people were not alerted to the possible hazards of fallout and had no comprehension of what was happening; thus they took no evasive action and made no effort to decontaminate themselves. American servicemen on a nearby contaminated island, who were more alert to the danger and added clothing and decontaminated themselves showed considerably less effect than did Marshallese comparably exposed. The Rongalapese were not evacuated from the contaminated island, and thus were not decontaminated for 2 days, at which time a large percentage of the dose from the rapidly decaying fission products had been received. It is clear that the great bulk of the beta dose was derived from material deposited on the skin, and the habits of the Marshallese tended to maximize the deposition of the material on the skin. They wore rather scanty clothing and no shoes, and spent a good deal of time out of doors. The use of thick hair oil aided in collecting the material on the head. The high humidity and sweating contributed by encouraging the material to collect on the skin. Thus one might conclude that the beta lesions would constitute an extensive problem only under the rather favorable conditions for it that were present in the Marshallese, and that the problem would essentially not exist should an American city be subjected to fallout radiation. And further, one could conclude that since beta skin lesions might be classified more as a minor effect and a nuisance rather than an incapacitating or deadly one, that one might essentially ignore the problem in the face of the known serious consequences of the penetrating gamma radiation and other potentially lethal modalities. This evaluation could pertain; however, it is necessary to inject a word of caution.

It is quite true that Americans spend a good deal of time inside; however, under some circumstances (warmer regions, summertime) sizable numbers could be outside, with portions of the skin exposed. Also especially in the peripheral zone from the point of detonation where windows may be shattered without other serious structural damage, it may not be necessary to be outside to have material deposited on one. Fallout on a previously devastated area would present a like picture. The fallout was visible in the Marshalls; it might not be in continental surroundings. Even a thin layer of clothing protected the Marshallese from visible damage from fallout from the particular device employed. I do not know to what degree the beta energy spectrum from this device would represent closely that from more recent devices. One cannot ignore the possibility of fallout coming down in rain, in which event clothing, if not removed, might provide the ideal situation for severe beta lesions. It is entirely possible under the chaotic conditions that would exist following attack that no facilities for adequate decontamination may be available. An educated, prepared population under almost any circumstances can do much to lessen the degree of damage or avoid damage completely; however, in the author's opinion, the vast majority of Americans are neither prepared for, nor educated to the danger of fallout in general, let alone the possible hazard from beta radiation.

The main point to be made from the above remarks is that while beta lesions, considered in the overall possible casualty situations, undoubtedly is a lesser consideration, it is still possible that appreciable segments of the involved might develop beta lesions if exposed to fallout and no preventive measures were taken. If this be the situation, the results potentially could be more serious than in the Marshallese, and much more than a mere nuisance, for the following reasons: in the Marshallese, while the white count

of the blood was markedly depressed, this and other immune mechanisms apparently were never impaired to the point at which the individual was not able to ward off possible invading organisms. Further, the point of maximum effect on the white count occurred relatively late, in the 5th and 6th week, after the beta lesions were well on the way to healing. With a larger dose of gamma radiation, and had the Marshallese been only a few miles further north than they were at the time of fallout they would have received a considerably larger dose, the situation might have been different. The white count would have fallen faster, and it and other immune mechanisms would have been seriously affected. Then more of the lesions might have become affected, and in addition the open lesions would provide a portal of entry for invading organisms, leading potentially to generalized infection. Infection is the problem of perhaps greatest magnitude with massive total body gamma exposure, and with open skin lesions many might succumb that otherwise might survive; especially under conditions that undoubtedly would pertain, in which no, or inadequate, medical care would be available. Thus, at present, I do not think we should ignore completely the beta lesion problem.

In summary, there can be no doubt that in a fallout field, within hours and perhaps days of detonation, penetrating gamma radiation is the controlling hazard. Gamma radiation is the agent that kills primarily. However, there also is no doubt that extensive beta lesions have occurred, and might occur under some conditions in a fallout field. In an unprepared population unaware of the potential danger, beta skin lesions could represent a potentially serious hazard to appreciable numbers of individuals exposed. In a well prepared population educated to the potential hazard the beta skin lesion problem would be minimal indeed.

Summary

The Marshallese accident in March 1954 demonstrated clearly that extensive beta lesions of the skin, in the absence of a lethal dose of gamma radiation, can occur under some conditions in an unprepared population exposed to a high-level fallout radiation. The fallout began on Rongelap Atoll in the Marshall Islands approximately 5 hours after the detonation of a high yield thermonuclear device, and the 64 individuals of this atoll were evacuated approximately 2 days later. An estimated 175 r. of penetrating gamma radiation was delivered to the entire body, in addition to large doses of beta radiation to exposed areas of skin to which the fallout material clung. Beginning approximately 2 weeks after exposure, lesions of the skin appeared on some 90 percent of the individuals. The affected areas included the head, and other locations where the material had deposited. Most of the lesions were superficial and healed rapidly. Some were deep and painful, and healed more slowly with some residual scarring. There has been no evidence to date of secondary breakdown or malignant change in these lesions.

Several factors pertained that made the Marshallese incident possibly the worst that could happen with respect to the relative importance of the beta hazard under conditions of fallout (of course populations could be exposed to much larger total doses of both beta and gamma radiations than were the Marshallese). The people were not educated nor prepared for the danger, and prolonged exposure without evasive action or decontamination occurred. The climatic conditions, conducive to relatively scanty clothing and outdoor existence also increased the degree of exposure. Under conditions of living in a temperate climate, many of these adverse factors would not normally be operative, and thus the beta problem would be expected to be minimal. However, it must be pointed out that exposure to contact beta radiation of a sizable number of individuals might occur in an uninformed population under some conditions (area of milder climate or in summer, individuals in buildings with shattered windows, fallout on a previously devastated area, clothed individuals caught in radioactive rain), or under chaotic conditions in which decontamination might not be possible. In these affected individauls, in the absence of decontamination, the resultant skin lesions in some could be much more serious than those seen in the Pacific islands. If the concomitant gamma exposure were higher than that received by the Marshallese, which it could easily be, the resultant depression of the white blood cell count, and of other immune mechanisms necessary to combat infection would be correspondingly more severe. Under these circumstances the open skin lesions could serve as a portal of entry for organisms, leading potentially to fatalities in individuals that might otherwise survive. Thus while the penetrating gamma hazard would by all odds be the most lethal agent in a fallout field, the beta skin hazard can not be ignored and must be guarded against. *Only in a population that is informed of the potential danger and is prepared will beta hazard be reduced to a minimum.* ▲

FEDERAL TRAINING PROGRAMME

The author of the following article, C. H. Little, is the Instructional Planning Officer, Federal Emergency Measures Organization.

ONE OF THE ASSIGNMENTS given to the Emergency Measures Organization is the coordination at the Federal level of education and training in the various fields of civil emergency planning.

Under the threat of nuclear weapons and long range delivery systems Canada has been preparing a capacity for decentralized government. The training of the men and women who will operate this complex machinery of government is a matter of prime importance.

Dealing first with the Federal complex of emergency government facilities a series of courses was commenced early in 1960 with the aim of giving senior officers of the Federal government the background needed to draw up and to implement departmental civil emergency plans. Twelve of these courses have already been held in Ottawa or in Arnprior and the thirteenth was held the first week of June 1962. The content of these courses—they last three to five days according to circumstances—consists of "The Threat", "The Effect of Nuclear Weapons", "Governmental Civil Emergency Planning", "Departmental Planning", "Personal Survival Planning" and special lectures and discussions on the essentials of emergency government including the decentralized system running from the federal complex through regional emergency headquarters to zone headquarters and down to the various municipal headquarters. At the Ottawa courses the stress is on the functions and operations of the centres and sites which the candidates would expect to man in a real emergency.

It is sometimes overlooked that many federal departments and agencies have extensive representation in the provinces or regions as they are known. To assist EMO Regional Directors a series of Regional Orientation Courses was arranged. These vary from the Ottawa courses by stressing Regional Emergency Headquarters and relocation sites together with local communications, transportation and supply. The aim of these two or three day courses is primarily to give federal officers in the regions the background needed to carry out their regional civil emergency responsibilities. At the same time the provincial officers who will be carrying out their duties in the R.E.H.Q.'s have been invited to attend, and it has been found that over a third of those at these regional courses have been from provincial governments. Recently, as federal plans have developed—especially in the fields of supply and transportation—a growing number of representatives from business and industry have been brought in because they form part of federal emergency teams.

COURSES TO DATE

Place	Number Held	Attendance
Ottawa	12	539
Newfoundland	1	96
Prince Edward Island	1	33
Nova Scotia	4	203
New Brunswick	2	147
Quebec	2	87
Ontario	4	235
Manitoba	5	251
Saskatchewan	4	210
Alberta	2	117
British Columbia	1	67
Totals	38	1985

There can be no civil emergency operations without the municipalities. To assist chief magistrates to draw up their plans a number of Mayors' Conferences have been held for periods of three to four days. After dealing with the subjects of common concern, these conferences emphasize planning and procedures at the local level (the Financial Assistance Programme is easily the favourite topic) and afford opportunities to discuss municipal problems. The next national conference is being held the last week of June, 1962, and a special conference in the French language will be held the first week in July.

As indicated in the accompanying table nearly two thousand officers of the three levels of government have attended these orientation courses in emergency government during the past two years. They provide an encouraging capacity for Canada to put into operation, if necessary, our decentralized system of government.

MAYORS' AND REEVES' CONFERENCES

ATTENDANCE

Date	Newfoundland	Nova Scotia	Prince Edward Island	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
May 1960	—	—	—	—	First	76				
Oct. »	—	—	—	—	being	—	14	15	16	15
Oct. »	5	28	8	14	held					
Nov. »	—	—	—	—	July	73				
Mar. 1961	—	7	5	10	1962	19	29			
June »	14	—	—	—	—	—	14	14	14	14
Nov. »	—	—	—	—	—	53				

Some federal departments have already found it necessary to carry civil emergency instruction to greater numbers of their staffs than the key members of emergency teams. To accommodate them two types of one-day courses have been drawn up. The first consists of ten or twelve separate sessions given at weekly intervals—usually at the lunch hour or after hours—with special speakers being brought in as far as circumstances permit. The second type is a one-day presentation of the same material: Threat, Weapons Effects, Governmental Emergency Planning, Departmental Planning Guide, the Particular Department's Own Emergency Plan and Survival Planning for Individuals and Families. As the accompanying table shows a number of Federal departments have put this course before their employees.

Department	Place	Number Held	Attendance
Mines and Technical Surveys	Ottawa	1	250
Dept. of Public Works	»	1	250
Dept. of Transport	»	1	80
National Film Board	Montreal	1 (Eng)	270
National Film Board	Montreal	1 (Fr)	80

For a decade the Canadian Civil Defence College—established at Arnprior in 1954, but previously occupying number of temporary homes—has been providing a series of courses designed principally to help people save their lives in the event of a catastrophe. Some of these courses have been for specialists, some for policy-makers, some for operators of life-saving instruments or techniques. The programme at CCDC continues to be one of the main concerns of EMO assisted and advised by the Interdepartmental Civil Emergency Training Committee and its Standing Sub-Committee on Courses.

The I.C.E.T.C. and its standing Sub-Committee are provided by EMO with both Chairman and Secretary. This provides for continuity and enables both committees to function with the minimum of delay. Their principal concerns at the moment are the completion of a draft national civil emergency training plan and the development of a programme which will bring the CCDC to its full realization as a Staff College.

There are four major trends in future planning: French-language courses, departmental operational courses at all levels and decentralized government, intradepartmental training and national survival courses at the zone and municipal level.

In recent months the Province of Quebec has shown an increased interest in civil emergency planning. These activities have led to a requirement for additional courses in French. In February 1962 the first National Survival Orientation Course was offered at CCDC in French. As recorded before, a Mayors' Conference in French is scheduled for July. In the autumn semester will come two National Survival Courses both Orientation and Operations. As the capacity for this instruction increases more courses in French will be offered both at CCDC and in the province itself.

A one-day "how to operate in an emergency site" course is being developed. This course allied to the experiments being tried in some provinces, will form the basis of on-site training for the officers whose place of duty will be in the various centres associated with emergency government. It is the hope that this training will form a useful prelude to regional and national exercises.

There appears to be a great demand for civil emergency information and training within all sections of government. Under development we have the one-day course, referred to above, amplified and illustrated by slides and background documents. Civil emergency planning officers will be offered this material to conduct their own training programmes.

It is not to be thought of that emergency government sites should remain idle and untenanted. Plans are being drawn up to conduct training courses "on the spot" to give the civilian officers a competence in their operation.

The general intent of all this civil emergency training is to develop in our whole system of government a continuing ability to deal with emergencies and to inculcate a sense of awareness that such preparedness is a normal function of government over a long period of time. Like other kinds of insurance we hope it will never be claimed; at the same time there is no substitute for civil preparedness if the real emergency should come. ▲

FEDERAL EMO INFORMATION PLAN *(conclusion)*

designed to reflect national aspects of emergency measures at home and abroad.

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Press Releases

EMO will issue press releases on newsworthy national projects, events and developments for which it is responsible. When possible, EMO Regional Officers and federal departments will be advised of the content, date and distribution of such releases. Where possible content of statements made in the House of Commons will be provided at the earliest possible time.

Public Speakers

Advance information on the availability of visiting EMO officers to talk to community groups or meet with representatives of the Press, Radio or TV will be given EMO Regional Officers.

Conclusion

The EMO Public Information Plan for 1962-63 is an extensive one as it includes a variety of means of dissemination. It will be important that provincial and municipal officials carry out similar activities to provide the public with the information needed for personal planning. This is the only way in which such a plan will be effective. And if civil emergency planning is to be meaningful it is vitally important that the public be informed. ▲

TARGET AREA HEADQUARTERS *(conclusion)*

alert warning is received. The traffic post team on each route will be organized into a section with its headquarters at one post. The sections will be grouped into platoons with a headquarters at sector headquarters. Communications will be provided to link the posts with section headquarters and thence to platoon headquarters. Operational procedures will be developed which will include orders and rendezvous for civil police who are caught in the damaged area. These police will serve to reinforce the traffic control system and give it mobility in the early stages.

The problem of providing sufficient manpower for rescue in each target area is a formidable one. As mentioned before, not nearly enough forces are available, nor are the three services ever likely to have enough. It was decided, therefore, to rely on the citizens of Canada volunteering their services in an emergency. The Army, both Regular and Militia, will provide the organized framework and the trained leadership. To do this both Regular and Militia units have been made into cadres to provide the skeletons on which rescue and support units can be built. Units in each town and village will be ready to accept volunteers and lead them in the re-entry task under the control of TAHQ.

This combination of a pre-attack control organization and a cadre system of re-entry units is expected to more than treble the original capability of the Canadian Army in rescue. If the citizens respond to the call for volunteers in greater numbers than our somewhat pessimistic planners anticipate, the capability would be further increased. The Army, by establishing TAHQs and planning re-entry, has taken the first vital steps, but there is a limit to our capability in national survival. It will require the support and resources of all Canadians if our country is to survive the devastation of a nuclear assault. ▲

SURVIVAL LITERATURE

For Further Reading

Your Basement Fallout Shelter—Blueprint for Survival No. 1

Basement Fallout Shelter—Blueprint for Survival No. 2

Fallout on the Farm—Blueprint for Survival No. 3

11 Steps to Survival—Blueprint for Survival No. 4

Survival in Likely Target Areas—Blueprint for Survival No. 5

Simpler Shelters

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For your free copy write to EMO P.O. Box 10,000 in your Provincial Capital (NOT OTTAWA) or to your Municipal EMO/Civil Defence Co-ordinator.

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